

Hamilton

Community Climate Change Action Plan (BOH15025)

Presentation to the Board of Health October 19, 2015

Brian Montgomery

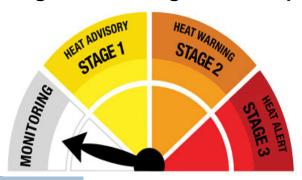
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Climate Change

Changes in the climate or long-term, average weather patterns.

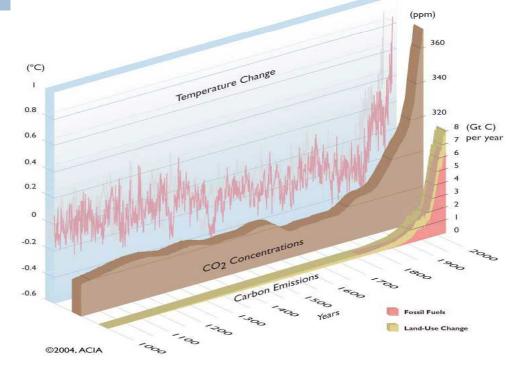






Key Greenhouse Gases (GHGs)

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂ O)
- Hydrofluorocarbons (HFC's)
- Perflourocarbons (PFC's)
- Sulfur Hexafluoride (SF₆)
- Nitrogen Trifluoride (NF3



Community (weather) impacts...

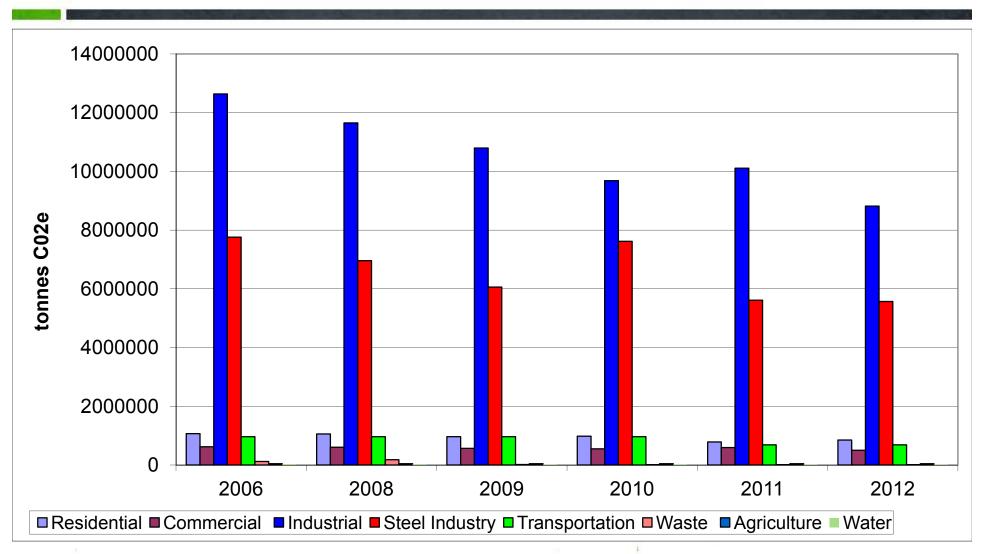


- Average Mean Temp. since 1970 increased 0.9 C.
- Annual Total
 Precipitation
 increased 26 mm.
- 100 & 50 year storms caused flooding.
- Floods, Microbursts,
 Drought, Invasive
 species...





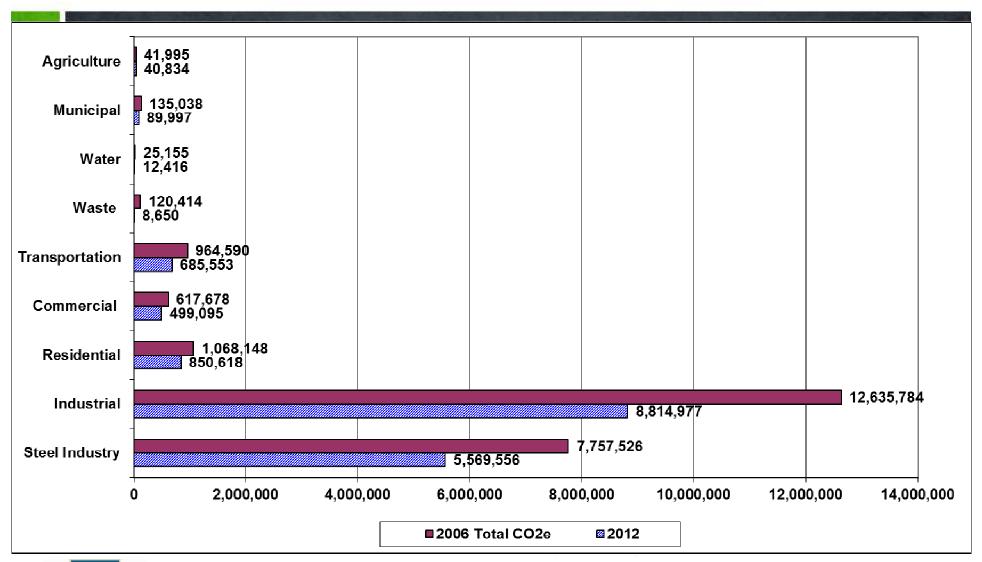
Community Emissions Trends 2008-2012







Community Emissions Changes 2006-2011

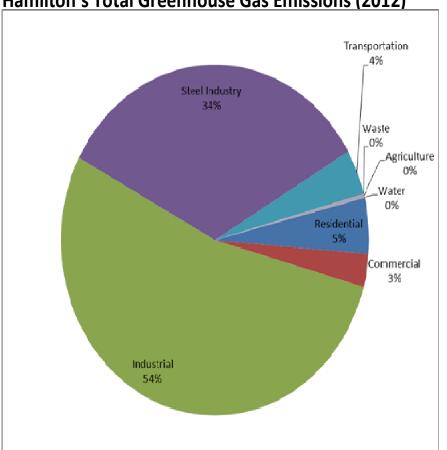




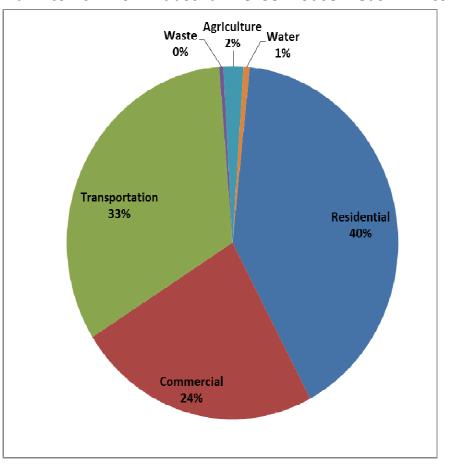


Community Emissions 2012





Hamilton's Non-Industrial Greenhouse Gas Emissions







Why a Plan?

- December 2013 Council endorsed the development of a Community Climate Change Action Plan (BOH13204).
- Identified under the City of Hamilton 2012-2015
 Strategic Plan.
- Climate Change is happening and happening locally.
- Impacts the community (good and bad).
- Sources of action in community.
- City cannot address the challenge alone.
- Community wants action.
- Builds on community and City action.





GHG Mitigation and Adaptation Together

MITIGATION ADAPTATION

Green roofs

Sewer upgrades

Capture landfill gas

Better insulation

Heat alert system

Expand transit use

Permeable pavement

Control of invasive

Energy conservation

Reduce peak demand

species

Active transportation

Expand tree canopy

Business continuity planning

Etc.





Lets Talk About the Weather

- Hamilton Climate Change Action Plan
 - Be prepared for risks/impacts of climate change (Adaptation)
 - Reduce greenhouse gas emissions (80% by 2050)
 (Mitigation)
 - Looking for opportunities for action







Engagement Reach...

Mechanism	Engagement by the Numbers					
Climate Conversation Launch Event (July 22, 2014)	~100 attendees					
Places & Spaces Conversations (30 locations)	20+ conversations200 + individuals					
Workshop (4)	150+ participants					
Task Forces	8 Task Forces 65+ Task Force members					
Notices and Newsletters	358 individuals91 neighbourhood associations,businesses and organizations					
Twitter (@climateconvo)	290+ followers					

Themes (Taskforces)

Agriculture & Food

Awareness & Education

Energy

Infrastructure

Land Use,
Buildings & Build
Form

Local Economy & Business

People & Health

Transportation/
Mobility

Water & Natural Heritage

Ten Actions (1 – 3 years)

- Support local food production/consumption and integrate climate change mitigation/adaptation strategies into existing farm and food plans and initiatives
- Establish ongoing education and awareness program/campaign for climate change
- Develop a Community Energy Plan to guide the Hamilton community's energy future
- Revise and update municipal infrastructure guidelines to prioritize Low Impact Development (LID) as a preferred method for stormwater management
- Establish variable development charges to reflect real costs of buildings and maintaining infrastructure

Ten Actions (1 – 3 years)

- Create an accessible toolkit for businesses to assist with impact analysis and business continuity planning
- Conduct a local community vulnerability assessment of public health impacts from climate change
- Expand public transit services to include dedicated rapid transit lanes where possible
- Secure property that serves as source water storage or preserves wildlife corridors within the catchment
- Establish an ongoing oversight and coordination body to guide implementation of the Hamilton Climate Change Action Plan and report back on community progress and success

Table 23
Estimated Annual Impacts of the Climate Action Plan Priorities in Hamilton

Climate Action Blan			A. E nvironmental Impacts			B. Province Wide Economic Impacts					C. Regional Economic Impacts in Hamilton				
	Climate Action Plan	GHC Emissions (tonnes CO2/year)		\$000'a	\$000'a \$000'a \$000'a			\$000'a	\$000'a \$000'a		\$000's				
		Gross	Reduction	Net	Total Investment and Incremental Expenditures	Gross Economic Activity	Value Added to Provincial Economy	Tax Revenue to all Levels of Government	Provincial Employment (FTEs)	Avoided Cost		Value Added to Local E conomy	Tax Revenue to Local Government	Local Employment (FTEs)	
1	Support Local Food Production and Consumption	16,072	3,541	12,531	\$36,638	\$86,268	\$46,925	\$14,052	842.0		\$/6,489	\$44,572	\$1,/ 3/	604.0	
2	Establish On-Going Education and Awareness Program Campaign	34		34	\$40	\$ 116	\$4 2	\$13	0.5		\$61	\$22	\$1	0.3	
3	Develop a Community Energy Plan to Guide Hamilton's Energy Future	5,467	8,585	-3,118	\$ 5,892	\$14,644	\$7,359	\$2,275	68.4	\$5,892	\$10,429	\$4,478	\$142	44.5	
4	ReviseiUpdate Infrastructure Guidelines (annualized)	11,412	23,692	-12,280	\$12,304	\$30,310	\$ 15,280	\$4,734	141.1	\$ 12,304	\$22,394	\$9,351	\$278	91.7	
5	Establish Variable Development Charges and Water Kates set to reflect real cost (10%).	14,606	8,336	6,270	\$15,747	\$38,791	\$19,555	\$6,059	181 0	\$15,747	\$28,345	\$11,810	\$355	118 0	
6	Create an Accessible Tool Kit for SMEs to assist with impact analysis and Business Community Planning (one-time cost)	209		209	\$250	\$ 639	\$ 334	\$106	3.2		\$488	\$251	\$7	2.1	
7	Conduct a Local Community Vulnerability assessment of Public Health Impacts from Climate Change	8,634	7,045	1,589	\$ 9,343	\$ 23,015	\$ 11,602	\$3,595	107.2	\$9,343	\$16,537	\$7,101	\$211	69.7	
8	E xpand Local Transit Services to include a dedicated Rapid transit Lanes	23,024	231,738	208,714	\$24,823	\$ 61,149	\$30,827	\$9,551	285.0	\$24,823	\$44,681	\$18,617	\$560	185.0	
9	Protect and preserve green spaces	972	529	443	\$1,060	\$2,652	\$1,349	\$417	13.4	\$1,000	\$2,000	\$860	\$27	7.3	
10	Establish an Ongoing Oversight and Coordination body to Guide and report on Hamilton's Climate Change Action Plan.	115		115	\$1 47	\$377	\$208	\$66	1.8		\$182	\$129	\$4	0.9	
	IUIAL	80,546	283,467	-202,920	\$106,244	\$257,961	\$133,481	\$40,868	1,643.6	\$69,109	\$201,606	\$97,191	\$3,321	1,123.5	

Source: Econometric Research Limited

Next steps..

- Plan approved by Council (2015)
- Climate Change Action Committee formed (2016)
- Implement Actions
- Continue engagement and communicate
- Work with community and staff
- Find further funding opportunities
- Report progress annually

Let's Talk About the Weather



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www.climatechangehamilton.ca/plan



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